Welcome to STN International! Enter x:x LOGINID: ssspt189dxw PASSWORD: TERMINAL (ENTER 1, 2, 3, OR ?):2 * * * * * * * * * * Welcome to STN International * * * * * * * * * * NEWS 1 Web Page for STN Seminar Schedule - N. America NEWS 2 OCT 02 CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt NEWS 3 OCT 19 BEILSTEIN updated with new compounds NEWS 4 NOV 15 Derwent Indian patent publication number format enhanced NEWS 5 NOV 19 WPIX enhanced with XML display format NEWS 6 NOV 30 ICSD reloaded with enhancements NEWS 7 DEC 04 LINPADOCDB now available on STN
NEWS 8 DEC 14 BEILSTEIN pricing structure to change
NEWS 9 DEC 17 USPATOLD added to additional database clusters
NEWS 10 DEC 17 IMSDRUGCONF removed from database clusters and IMSDRUGCONF removed from database clusters and STN NEWS 11 DEC 17 DGENE now includes more than 10 million sequences NEWS 12 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment NEWS 13 DEC 17 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary NEWS 14 DEC 17 CA/Caplus enhanced with new custom IPC display formats NEWS 15 DEC 17 STN Viewer enhanced with full-text patent content from USPATOLD NEWS 16 JAN 02 STN pricing information for 2008 now available NEWS 17 JAN 16 CAS patent coverage enhanced to include exemplified prophetic substances NEWS 18 JAN 28 USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats NEWS 19 JAN 28 MARPAT searching enhanced NEWS 20 JAN 28 USGENE now provides USPTO sequence data within 3 days of publication NEWS 21 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment NEWS 22 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS 23 FEB 08 STN Express, Version 8.3, now available
NEWS 24 FEB 20 PCI now available as a replacement to DPCI
NEWS 25 FEB 25 IFIREF reloaded with enhancements
NEWS 26 FEB 25 IMSPRODUCT reloaded with enhancements
NEWS 27 FEB 29 WFINDEX/WFIDS/WFIX enhanced with ECLA and current
U.S. National Patent Classification

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NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

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* * * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 19:56:16 ON 29 MAR 2008

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

FILL ESTIMATED COST

SINCE FILE TOTAL. ENTRY SESSION 6.30 6.30

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ... ENTERED AT 20:14:29 ON 29 MAR 2008

69 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

- => s bioabsorbable filament? and lumen? and cells and (dermal or epidermal) and graft?
 - 28 FILES SEARCHED...
 - 53 FILES SEARCHED..
 - 2 FILE USPATFULL
 - FILE USPAT2
 - 2 FILES HAVE ONE OR MORE ANSWERS, 69 FILES SEARCHED IN STNINDEX
- OUE BIOABSORBABLE FILAMENT? AND LUMEN? AND CELLS AND (DERMAL OR EPIDERMAL) AND GRAFT?

=> file uspatfull uspat2 COST IN U.S. DOLLARS

SINCE FILE TOTAL. ENTRY SESSION

FULL ESTIMATED COST 1.30 7 60

FILE 'USPATFULL' ENTERED AT 20:15:46 ON 29 MAR 2008 CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 20:15:46 ON 29 MAR 2008

CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 11 L2

=> d 12 1-3

TN

ANSWER 1 OF 3 USPATFULL on STN 2007:309836 USPATFULL

AN

3 L1

Bioabsorbable Magnesium-Reinforced Polymer Stents

Doty, David, Forestville, CA, UNITED STATES

Medtronic Vascular. Inc., Santa Rosa, CA, UNITED STATES, 95403 (U.S. PA corporation)

PТ US 2007270940 A1 20071122

```
A1 20070507 (11)
AΤ
      US 2007-744977
PRAT
      US 2006-747389P
                          20060516 (60)
      Utility
FS
      APPLICATION
LN.CNT 509
INCL
      INCLM: 623/001.220
       INCLS: 623/001.380
      NCLM: 623/001.220
       NCLS: 623/001.380
       IPCI
             A61F0002-88 [I,A]; A61F0002-82 [I,C*]
       IPCR
            A61F0002-82 [I,C]; A61F0002-88 [I,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 2 OF 3 USPATFULL on STN
AN
       2007:12415 USPATFULL
ТΤ
       Biomimetic biosynthetic nerve implant
TM
      Romero-Ortega, Mario I., Coppell, TX, UNITED STATES
       Galvan-Garcia, Pedro, Irving, TX, UNITED STATES
PΙ
       US 2007010831
                          A1 20070111
      US 2007100358
                          A2 20070503
                          A1 20060505 (11)
      US 2006-418927
ΑI
RLI
       Continuation-in-part of Ser. No. WO 2004-US38087, filed on 5 Nov 2004,
       PENDING Continuation-in-part of Ser. No. US 2002-209966, filed on 1 Aug
       2002, ABANDONED
PRAI
      US 2003-517572P
                          20031105 (60)
DT
      Utility
FS
      APPLICATION
LN.CNT 1209
INCL
       INCLM: 606/152.000
NCL
      NCLM: 606/152.000
IC
             A61B0017-08 [I,A]; A61B0017-03 [I,C*]
       IPCI-2 A61B0017-08 [I,A]; A61B0017-03 [I,C*]
       IPCR A61B0017-03 [I,C]; A61B0017-08 [I,A]
    ANSWER 3 OF 3 USPAT2 on STN
L2
AN
       2007:12415 USPAT2
ΤI
       A Biomimetic Synthetic Nerve Implant
IN
       Romero-Ortega, Mario, 3100 Sugarbush Ln., Carrollton, TX, UNITED STATES
       Galvan-Garcia, Pedro, RR 21, Box 109-PG, Mission, TX, UNITED STATES
PA
      Texas Scottish Rite Hospital for Children, Dallas, TX, UNITED STATES,
       75218-3993 (U.S. corporation)
PΙ
      US 2007100358
                          A2 20070503
AΙ
      US 2006-418927
                          A1 20060505 (11)
      Continuation-in-part of Ser. No. WO 2004-US38087, filed on 5 Nov 2004,
RI.T
      HINKNOWN
      US 2003-517572P
PRAI
                         20031105 (60)
DT
      Utility
FS
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LN.CNT 1207
INCL
       INCLM: 606/152.000
NCL
       NCLM: 606/152.000
IC
             A61B0017-08 [I,A]; A61B0017-03 [I,C*]
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       IPCR A61B0017-03 [I,C]; A61B0017-08 [I,A]
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=> d hist

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHOS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ... ENTERED AT 20:14:29 ON 29 MAR 2008

SEA BIOABSORBABLE FILAMENT? AND LUMEN? AND CELLS AND (DERMAL OR

FILE USPATFULL

FILE USPAT2

OUE BIOABSORBABLE FILAMENT? AND LUMEN? AND CELLS AND (DERMAL OR L1

FILE 'USPATFULL, USPAT2' ENTERED AT 20:15:46 ON 29 MAR 2008 L2 3 S L1

=> logoff

ALL L# OUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y) /N/HOLD: v

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 6.15 13.75

STN INTERNATIONAL LOGOFF AT 20:16:22 ON 29 MAR 2008

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Web Page for STN Seminar Schedule - N. America NEWS 2 NOV 21 CAS patent coverage to include exemplified prophetic

substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present

NEWS 3 NOV 26 MARPAT enhanced with FSORT command NEWS 4 NOV 26 CHEMSAFE now available on STN Easy

NEWS 5 NOV 26 Two new SET commands increase convenience of STN searching

NEWS 6 DEC 01 ChemPort single article sales feature unavailable

NEWS 7 DEC 12 GBFULL now offers single source for full-text coverage of complete UK patent families

NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS

NEWS 9 JAN 06 The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo

NEWS 10 JAN 07 WPIDS, WPINDEX, and WPIX enhanced Japanese Patent Classification Data

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NEWS TPC8 For general information regarding STN implementation of IPC 8

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=> index bioscience

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FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.22 0.22

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AOUALINE, AOUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ... ENTERED AT 22:59:14 ON 01 FEB 2009

68 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s graft and filament and lumen and hydrophilic interior and cells and (epiderm? or derm?)

27 FILES SEARCHED... 58 FILES SEARCHED...

1 FILE USPATFULL

- 1 FILES HAVE ONE OR MORE ANSWERS, 68 FILES SEARCHED IN STNINDEX
- QUE GRAFT AND FILAMENT AND LUMEN AND HYDROPHILIC INTERIOR AND CELLS AND (E PIDERM? OR DERM?)

=> file uspatfull

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.72

2.94

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 23:01:19 ON 01 FEB 2009

CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 29 Jan 2009 (20090129/PD) FILE LAST UPDATED: 29 Jan 2009 (20090129/ED)

HIGHEST GRANTED PATENT NUMBER: US7484247

HIGHEST APPLICATION PUBLICATION NUMBER: US20090031463

CA INDEXING IS CURRENT THROUGH 29 Jan 2009 (20090129/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 29 Jan 2009 (20090129/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2008

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2008

USPATFULL now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

```
=> s 11
         86699 GRAFT
         91228 FILAMENT
         73834 LUMEN
        176609 HYDROPHILIC
        862942 INTERIOR
           199 HYDROPHILIC INTERIOR
                 (HYDROPHILIC (W) INTERIOR)
        644975 CELLS
         62831 EPIDERM?
         81886 DERM?
L2
             1 GRAFT AND FILAMENT AND LUMEN AND HYDROPHILIC INTERIOR AND CELLS
               AND (EPIDERM? OR DERM?)
=> d 12 1
T.2
    ANSWER 1 OF 1 USPATFULL on STN
AN
       2005:247149 USPATFULL
TI
       Tissue engineered biomimetic hair follicle graft
IN
       Barrows, Thomas H., Austell, GA, UNITED STATES
       Cochran, Stephen A., Tucker, GA, UNITED STATES
      Marshall, Bryan, Atlanta, GA, UNITED STATES
PA
      Aderans Research Institute, Inc., Beverly Hills, CA, UNITED STATES (U.S.
       corporation)
       US 20050214344
                          A1 20050929
       US 2004-810518
                          A1 20040326 (10)
AT
DT
      Utility
FS
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LN.CNT 1110
INCL
      INCLM: 424/426.000
NCL
      NCLM: 424/426.000
IC
       [7]
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              A61F002-00
       IPCI
              A61F0002-00 [ICM, 7]
       IPCR
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              A61L0027-58 [I.A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d hist
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     DRUGMONOG2, DRUGU, EMBAL, EMBASE, ... ENTERED AT 22:59:14 ON 01 FEB 2009
                SEA GRAFT AND FILAMENT AND LUMEN AND HYDROPHILIC INTERIOR AND C
               1 FILE USPATFULL
L1
                QUE GRAFT AND FILAMENT AND LUMEN AND HYDROPHILIC INTERIOR AND C
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              1 S L1
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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:v
COST IN U.S. DOLLARS
                                                 SINCE FILE
                                                                 TOTAL.
                                                      ENTRY
                                                               SESSION
FULL ESTIMATED COST
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                                                                   5.57
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PASSWORD:

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| * * * | * * | * * | * * | * Welcome to STN International * * * * * * * * * * |
|--------|-----|-----|-----|---|
| NEWS | 1 | | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | DEC | 01 | ChemPort single article sales feature unavailable |
| NEWS | 3 | JAN | 06 | The retention policy for unread STNmail messages |
| | | | | will change in 2009 for STN-Columbus and STN-Tokyo |
| NEWS | 4 | JAN | 07 | WPIDS, WPINDEX, and WPIX enhanced Japanese Patent |
| | | | | Classification Data |
| NEWS | 5 | FEB | 02 | Simultaneous left and right truncation (SLART) added |
| | | | | for CERAB, COMPUAB, ELCOM, and SOLIDSTATE |
| NEWS | | FEB | | GENBANK enhanced with SET PLURALS and SET SPELLING |
| NEWS | 7 | FEB | | Patent sequence location (PSL) data added to USGENE |
| NEWS | | FEB | | COMPENDEX reloaded and enhanced |
| NEWS | | FEB | | WTEXTILES reloaded and enhanced |
| NEWS | 10 | FEB | 19 | New patent-examiner citations in 300,000 CA/CAplus
patent records provide insights into related prior
art |
| NEWS | 11 | FEB | 19 | Increase the precision of your patent queries use
terms from the IPC Thesaurus, Version 2009.01 |
| NEWS | 12 | FEB | 23 | Several formats for image display and print options |
| 112110 | | | 20 | discontinued in USPATFULL and USPAT2 |
| NEWS | 13 | FEB | 23 | MEDLINE now offers more precise author group fields and 2009 MeSH terms |
| NEWS | 1.4 | FEB | 22 | TOXCENTER updates mirror those of MEDLINE - more |
| MEMS | 14 | FED | 23 | precise author group fields and 2009 MeSH terms |
| NEWS | 16 | FEB | 22 | Three million new patent records blast AEROSPACE into |
| MEMO | 10 | FED | 23 | STN patent clusters |
| NEWS | 16 | FEB | 25 | USGENE enhanced with patent family and legal status |
| MEMO | 10 | FED | 25 | display data from INPADOCDB |
| NEWS | 17 | MAR | 06 | INPADOCDB and INPAFAMDB enhanced with new display |
| 112110 | | | | formats |
| NEWS | 18 | MAR | 11 | EPFULL backfile enhanced with additional full-text |
| | | | | applications and grants |
| NEWS | 19 | MAR | 11 | ESBIOBASE reloaded and enhanced |
| NEWS | 20 | MAR | 20 | CAS databases on STN enhanced with new super role |
| | | | | for nanomaterial substances |
| NEWS | 21 | MAR | 23 | CA/CAplus enhanced with more than 250,000 patent |
| | | | | equivalents from China |
| NEWS | 22 | MAR | 30 | IMSPATENTS reloaded and enhanced |
| NEWS | 23 | APR | 03 | CAS coverage of exemplified prophetic substances enhanced |
| NEWS | 24 | APR | 07 | STN is raising the limits on saved answers |
| NEWS | | APR | | CA/CAplus now has more comprehensive patent assignee |
| | | | | information |

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE 'HOME' ENTERED AT 21:41:11 ON 24 APR 2009

=> index bioscience

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FULL ESTIMATED COST ENTRY SESSION 0.44 0.44

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOEMG, BIOSIS, BIOTECHABS, BIOTECHBS, BIOTECHBO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMOMOGOZ, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 21:42:31 ON 24 APR 2009

SINCE FILE

TOTAL

68 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s bioabsorbable filament and central(p)lumen and hair(p)follicle and (epidermal cells or dermal cells or ?dermis)

- 0* FILE ADISINSIGHT
- 0* FILE ADISNEWS
- 0* FILE AGRICOLA
- 0* FILE ANTE
- 0* FILE AOUALINE
- 0* FILE AQUASCI
- 0* FILE BIOENG
- 0* FILE BIOTECHABS
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 - 0* FILE DRUGU
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- 0* FILE FOREGE
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- 0* FILE HEALSAFE
- 0* FILE IMSDRUGNEWS
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 - 0* FILE LIFESCI
 - 0* FILE NTIS 0* FILE NUTRACEUT
 - 0* FILE OCEAN
 - 0* FILE PASCAL

 - 0* FILE PCTGEN 0* FILE PHARMAML
 - 0* FILE PROMT
 - 0* FILE SYNTHLINE
- 59 FILES SEARCHED ...
 - 0* FILE VETB
 - 0* FILE VETU
 - 0* FILE WATER
 - O FILES HAVE ONE OR MORE ANSWERS, 68 FILES SEARCHED IN STNINDEX
- OUE BIOABSORBABLE FILAMENT AND CENTRAL(P) LUMEN AND HAIR(P) FOLLICLE AND (EPIDERMAL CELLS OR DERMAL CELLS OR ?DERMIS)
- => s hair(p)graft and bioabsorbable(p)filament
 - 0* FILE ADISNEWS
 - 0* FILE ANTE
 - 0* FILE AQUALINE
 - 0* FILE BIOENG
 - 0* FILE BIOTECHABS
 - 0* FILE BIOTECHDS
 - 0* FILE BIOTECHNO
 - 0* FILE CEABA-VTB
 - 0* FILE CIN
 - 0* FILE FOMAD
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 - FILE IFIPAT
 - 0* FILE KOSMET 0* FILE NTIS
 - 0* FILE NUTRACEUT
 - 0* FILE PASCAL
 - 0* FILE PHARMAML

 - FILE USPATFULL
 - 0* FILE WATER
 - FILE WPIDS 1
 - FILE WPINDEX 1
- 4 FILES HAVE ONE OR MORE ANSWERS, 68 FILES SEARCHED IN STNINDEX
- OUE HAIR(P) GRAFT AND BIOABSORBABLE(P) FILAMENT

=> file ifipat uspatfull

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 2.72 3.16

FILE 'IFIPAT' ENTERED AT 21:44:55 ON 24 APR 2009

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FILE 'USPATFULL' ENTERED AT 21:44:55 ON 24 APR 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

```
=> s 12
L3 6 L2
```

=> rem dup 13

DUP IS NOT VALID HERE

The DELETE command is used to remove various items stored by the system.

To delete a saved query, saved answer set, saved L-number list, SDI request, batch request, mailing list, or user-defined cluster, format, or search field, enter the name. The name may include ? for left, right, or simultaneous left and right truncation.

Examples:

```
DELETE BIO?/Q - delete query names starting with BIO
DELETE ?DEUG/A - delete answer set names ending with DRUG
DELETE ?ELEC?/L - delete L-number lists containing BLEC
DELETE ENSYME/B - delete batch request
DELETE .MYCLUSTER
DELETE .MYFORMAT - delete user-defined cluster
DELETE .MYFORMAT - delete user-defined display format
DELETE .MYFIELD - delete mailing list
```

To delete an ordered document or an offline print, enter its number. $% \left(1\right) =\left(1\right) \left(1\right$

Examples:

DELETE P123001C - delete print request
DELETE D134002C - delete document order request

To delete an individual L-number or range of L-numbers, enter the L-number or L-number range. You may also enter DELETE LAST followed by a number, n, to delete the last n L-numbers. RENNMBER or NORENUMBER may also be explicitly specified to override the value of SET RENNMBER.

Examples:

```
DELETE L31 - delete a single L-number
DELETE L3-L6 - delete a range of L-numbers
DELETE L33- - delete the last 4 L-numbers
DELETE L33- - delete L33 and any higher L-number
DELETE L2-L6 RENUMBER - delete L55 and any lower L-number
DELETE RENUMBER - renumber remaining L-numbers and
renumber remaining L-numbers
DELETE RENUMBER - renumber L-numbers after deletion of intermediate L-numbers
```

Entire sets of saved items, SDI requests, batch requests, user-defined items, or E-numbers can be deleted.

Examples:

```
DELETE SAVED/Q - delete all saved queries DELETE SAVED/A - delete all saved answer sets
```

```
DELETE SAVED/L - delete all saved L-number lists
               - delete all saved queries, answer sets,
  DELETE SAVED
                  and L-number lists
  DELETE SAVED/S - delete all SDI requests
  DELETE SAVED/B - delete all batch requests
  DELETE CLUSTER - delete all user-defined clusters
  DELETE FORMAT - delete all user-defined display formats
  DELETE FIELD - delete all user-defined search fields
  DELETE SELECT - delete all E-numbers
  DELETE HISTORY - delete all L-numbers and restart the
                  session at L1
To delete an entire multifile SDI request, enter DELETE and
the name of the request. To delete a component from the
multifile SDI, enter DELETE and the name of the component.
=> dup rem 13
PROCESSING COMPLETED FOR L3
             4 DUP REM L3 (2 DUPLICATES REMOVED)
=> d 14 1-4
     ANSWER 1 OF 4 IFIPAT COPYRIGHT 2009 IFI on STN DUPLICATE 1
AN
      11472320 IFIPAT: IFIUDB: IFICDB
      Hair grafts derived from plucked hair
      Barrows Thomas H; Cochran Stephen A; Marshall Bryan; Schlicher Robyn; Su
     Yandong
PA
     Aderans Research Institute Inc (64038)
PΙ
     US 20070122387 A1 20070531
                        20061122
AΤ
     US 2006-603818
PRAI US 2005-738881P
                          20051122 (Provisional)
FI
     US 20070122387
                         20070531
     Utility; Patent Application - First Publication
FS
     CHEMICAL
     APPLICATION
ED
     Entered STN: 5 Jun 2007
     Last Updated on STN: 13 Jun 2007
CLMN 33
GΙ
      11 Figure(s).
     FIG. 1 is a confocal photomicrograph of a plucked hair having
      adhered epidermal stem cells. The epidermal stem cells are revealed by
     their uptake of a fluorescently labeled antibody to the CD200 cell
     surface protein.
     FIG. 2 is a confocal photomicrograph of a plucked hair that has
     been incubated in vitro with follicular dermal cells double labeled with
      fluorescently labeled antibodies to the CD73 (orange) and CD90 (green)
     cell surface proteins. CD90 labels all types of dermal cells. CD73 is a
     known marker for mesenchymal stem cells.
     FIG. 2a (inset) is a confocal photomicrograph showing the population of
      cells in which the plucked hair of FIG. 2 was incubated.
     FIG. 3 is a photograph of the underside of skin of a SCID mouse at the
      site of implantation of a traditional human scalp follicular unit
     hair graft comprised of 2 hairs.
     FIG. 3a (inset at right) is a photograph of the same two hair
     shafts growing from the human hair graft implantation
     as seen on the surface of the SCID mouse skin.
     FIG. 3b (inset at left) is a photograph of a typical plucked hair
     having adhered epidermal stem cells.
     FIG. 4 is a photograph of a plucked hair prior to implantation
     partially loaded into a 27 gauge hypodermic needle. The protruding end of
     the hair in the needle has a "club" end. Several other hairs
     with similar club ends are shown after implantation where the club ends
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are now buried beneath the skin.
     FIG. 5 is a photograph of the hypodermic needle, loaded with a plucked
     hair and saline solution that has been injected into the skin and
     withdrawn slightly.
     FIG. 6 is a photograph of a plucked hair that has been properly
      implanted.
     FIG. 7 is an H&E stained histological section of biopsied pig skin at the
     site where trichogenic newborn pig (same-breed) skin cells were implanted
      at the interface between the fat and the dermis. A plucked hair
      devoid of living cells was implanted with the trichogenic cells.
     FIG. 8 is a photograph of an implanted plucked hair, having
      adhered epidermal stem cells and associated follicular dermal cells,
      placed under the skin of a nu/nu mouse for 20 weeks.
    ANSWER 2 OF 4 USPATFULL on STN
       2007:236812 USPATFULL
       Tear and abrasion resistant expanded material and reinforcement
       Scanlon, John James, Wilmington, DE, UNITED STATES
       Scanlon, Catherine Ann, Wilmington, DE, UNITED STATES
       US 20070207186
                          A1 20070906
      US 2007-713361
                          A1 20070303 (11)
PRAI
      US 2006-779128P
                          20060304 (60)
      Utility
       APPLICATION
LN.CNT 7752
       INCLM: 424/424.000
INCL
       INCLS: 623/001.490; 623/001.420
       NCLM: 424/424.000
       NCLS: 623/001.420; 623/001.490
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       IPCR
             A61F0002-06 [I,C]; A61F0002-06 [I,A]; A61F0002-82 [N,C];
             A61F0002-94 [N,A]
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 3 OF 4 USPATFULL on STN
       2007:95565 USPATFULL
       Bioabsorbable plug implants and method for bone tissue regeneration
       Teoh, Swee Hin, Singapore, SINGAPORE
       Cheng Tan, Kim, Singapore, SINGAPORE
       Hutmacher, Dietmar, Singapore, SINGAPORE
       Lim, Thiam Chve, Singapore, SINGAPORE
       Schantz, Jan-Thorsten, Singapore, SINGAPORE
       Chou, Ning, Singapore, SINGAPORE
       Osteopore International Pte Ltd, Singapore, SINGAPORE, 117684 (non-U.S.
       corporation)
       US 20070083268
                          A1 20070412
      US 2004-579946
                          A1 20041122 (10)
       WO 2004-SG380
                               20041122
                               20060522 PCT 371 date
PRAT
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T. 4

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A61L0031-14 [I,C*]; A61L0031-14 [I,A]

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ANSWER 4 OF 4 IFIPAT COPYRIGHT 2009 IFI on STN DUPLICATE 2
1.4
      10975608 IFIPAT; IFIUDB; IFICDB
AN
TI
      Tissue engineered biomimetic hair follicle graft
IN
      Barrows Thomas H; Cochran Stephen A; Marshall Bryan
PA
      Aderans Research Institute Inc (64038)
PΙ
     US 20050214344 A1 20050929
AΙ
     US 2004-810518
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      APPLICATION
os
      CA 143:332653
ED
      Entered STN: 2 Oct 2005
      Last Updated on STN: 2 Oct 2005
CLMN 31
GI
       16 Figure(s).
     FIG. 1 is a cross-sectional schematic representation of a hollow
      filament of the present invention showing a solid outer
      filament (1) of bioabsorbable polymer, a porous inner
      filament (2) of the same or different bioabsorbable
      polymer, and a central lumen (3).
     FIG. 2 is a cross-sectional schematic representation of the hollow
      filament of FIG. 1 showing cells (4) (e.g. keratinocytes) that
      have been seeded into the porous inner filament by wicking a
      suspension of cells into the lumen of the filament and a clump
      of cells (5) (e.g. cultured dermal papilla cells or a hair follicle
      fragment) that has been seeded into the lumen of the filament
      by mechanically forcing it into an open end of the filament.
     FIG. 3 is a cross-sectional schematic representation of the
      filament of FIG. 2 shortly after implantation in the skin such
      that the proximal end (6) is in the dermis (7) and the distal end (8) is
      surrounded by down-grown epidermis (9).
     FIG. 4 is a scanning electron micrograph (SEM) of a hollow
      filament of the present invention made of a porous copolymer of
      d, 1-lactide and glycolide (PLGA).
     FIG. 5 is an SEM of the porous inner surface of the hollow
      filament of FIG. 4, which was exposed by cutting open the tube.
     FIG. 6 is a light photomicrograph showing a filament (10) with
      the construction shown in FIG. 1 wherein the outer filament (1)
      is made of solid PLGA and the porous inner filament (2) is made
      of crosslinked hvaluronic acid (HAX). FIG. 6 also shows a
      filament (11) made of PLGA containing no HAX. Both filaments were
      placed on a drop of water (12) colored red with food color dye. The PLGA
      only fiber (11) floated on the top of the water and did not wick any
      water into the lumen of the fiber, whereas the HAX-containing PLGA fiber
      (10) rapidly wicked the water into the lumen, giving the fiber a red
     FIG. 7(A) is a photograph of a mouse vibrissa (whisker) follicle (13) and
      a PLGA hollow filament (14) with an inside diameter of
      sufficient size to accommodate the excised follicle.
     FIG. 7(B) is a photograph of the PLGA hollow filament of FIG.
      7(A) with the follicle (13) inserted into the lumen.
     FIG. 8 is a photograph of a mouse whisker (15) that was observed growing
      on the back of a mouse against the background of regrown shaved pelage
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FIG. 9 is a photomicrograph of a hair follicle bulb (17) and hair shaft (18) growing under the skin of a mouse 30 days postimplantation of a mixture of cells obtained from neonatal mouse skin contained in a PLGA hollow filament (19).

PLGA hollow filament.

hair (16) 30 days post-implantation of a vibrissa follicle contained in a

FIG. 10 is a side-by-side comparison of two photomicrographs taken at the same magnification of the underside of skin excised from a nude mouse that had been injected 13 days previously with cells obtained from newborn black mouse epidermis and dermis. Panel A shows the control injection site and panel B shows the injection site containing exactly the same number of cells except that the injection fluid also contained 5% (w/v) of condroitin-6-sulfate, which resulted in the neogenesis of hair follicles that are larger and more numerous than the control. FIG. 11 also is a side-by-side comparison of two photomicrographs taken at the same magnification of the underside of skin excised from a nude mouse that had been injected 13 days previously with cells obtained from newborn black mouse epidermis and dermis. Panel A shows the same control injection site of FIG. 10 and panel C shows the injection site in the same mouse containing exactly the same number of cells except that the injection fluid also contained 20% (w/v) of Pluronic (TM) F-127 surfactant (a copolymer of ethylene and propylene oxides), which resulted in the neogenesis of hair follicles that are larger than those in the

control. FIG. 12 is a cross-sectional schematic representation of a hollow filament of the present invention in which the lumen (20) is slightly tapered to a closed end (21) attached to a porous plug (22). FIG. 13 is a cross-sectional schematic representation of a hollow filament of the present invention showing a fine pipette tip (23) containing cells (24) and fluid (25) that has been inserted into the tapered lumen (20).

FIG. 14 cross-sectional schematic representation of a hollow filament of the present invention showing a suspension of fluid (25) and cells (24) being expelled from a pipette tip (23) whereby the cells collect in the closed end of the lumen (21) and the fluid (25) is fully absorbed in the porous plug (22).

FIG. 15 is a photograph of the hollow filament scaffold of Example 10 and a 10-microliter pipette tip (26) identical to the one that was used as a mandrel in the process for making this embodiment of the present invention. The sheath (27) is made of PLGA and the fibrous mass (28) contained in the bulbous tip (29) is made of crosslinked gelatin/chondroitin-6-sulfate filaments. Charcoal particles (30) collected in the proximal portion of the fibrous scaffold upon injection of a slurry of charcoal particles and water into the scaffold through a pipette tip inserted into the scaffold sheath.

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(FILE 'HOME' ENTERED AT 21:41:11 ON 24 APR 2009)

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T. 3

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SINCE FILE TOTAL ENTRY SESSION 10.55

FULL ESTIMATED COST

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| NEWS | 3 | FEB | 02 | Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE |
| NEWS | 4 | FEB | 02 | GENBANK enhanced with SET PLURALS and SET SPELLING |
| NEWS | 5 | FEB | 06 | Patent sequence location (PSL) data added to USGENE |
| NEWS | 6 | FEB | 10 | COMPENDEX reloaded and enhanced |
| NEWS | 7 | FEB | 11 | WTEXTILES reloaded and enhanced |
| NEWS | 8 | FEB | 19 | New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art |
| NEWS | 9 | FEB | 19 | Increase the precision of your patent queries use terms from the IPC Thesaurus, Version 2009.01 |
| NEWS | 10 | FEB | 23 | Several formats for image display and print options discontinued in USPATFULL and USPAT2 |
| NEWS | 11 | FEB | 23 | MEDLINE now offers more precise author group fields and 2009 MeSH terms |
| NEWS | 12 | FEB | 23 | TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms |
| NEWS | 13 | FEB | 23 | Three million new patent records blast AEROSPACE into STN patent clusters |
| NEWS | 14 | FEB | 25 | USGENE enhanced with patent family and legal status display data from INPADOCDB |
| NEWS | 15 | MAR | 06 | INPADOCDB and INPAFAMDB enhanced with new display formats |
| NEWS | 16 | MAR | 11 | EPFULL backfile enhanced with additional full-text applications and grants |
| NEWS | 17 | MAR | 11 | ESBIOBASE reloaded and enhanced |
| NEWS | 18 | MAR | 20 | CAS databases on STN enhanced with new super role |
| | | | | for nanomaterial substances |
| NEWS | 19 | MAR | 23 | CA/CAplus enhanced with more than 250,000 patent equivalents from China |
| NEWS | 20 | MAR | 30 | IMSPATENTS reloaded and enhanced |
| NEWS | 21 | APR | 03 | CAS coverage of exemplified prophetic substances |
| | | | | |

NEWS 22 APR 07 STN is raising the limits on saved answers NEWS 23 APR 24 CA/CAplus now has more comprehensive patent assignee information NEWS 24 APR 26 USPATFULL and USPAT2 enhanced with patent assignment/reassignment information NEWS 25 APR 28 CAS patent authority coverage expanded NEWS 26 APR 28 ENCOMPLIT/ENCOMPLIT2 search fields enhanced NEWS 27 APR 28 Limits doubled for structure searching in CAS REGISTRY NEWS 28 MAY 08 STN Express, Version 8.4, now available NEWS 29 MAY 11 STN on the Web enhanced

NEWS 30 MAY 11 BEILSTEIN substance information now available on STN Easy

NEWS 31 MAY 14 DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format

NEWS 32 MAY 15 INPADOCDB and INPAFAMDB enhanced with Chinese legal status data

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 20:34:26 ON 15 MAY 2009

=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.22 0.22

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68 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view search error messages that display as 0* with SET DETAIL OFF.

=> s graft and central(p)lumen and bioabsorb? and hair follicle?

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COPYRIGHT (C) 2009 IFI CLAIMS(R) Patent Services (IFI)
FILE 'USPATFULL' ENTERED AT 20:35:54 ON 15 MAY 2009
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)
=> s 11
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=> d 13 1
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     Barrows Thomas H; Cochran Stephen A; Marshall Bryan
     Aderans Research Institute Inc (64038)
     US 20050214344 A1 20050929
     US 2004-810518
                          20040326
      US 20050214344
                          20050929
      Utility; Patent Application - First Publication
     CHEMICAL
      APPLICATION
     CA 143:332653
     Entered STN: 2 Oct 2005
      Last Updated on STN: 2 Oct 2005
CLMN 31
      16 Figure(s).
     FIG. 1 is a cross-sectional schematic representation of a hollow filament
     of the present invention showing a solid outer filament (1) of
      bioabsorbable polymer, a porous inner filament (2) of the same or
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- different bioabsorbable polymer, and a central
- lumen (3).
- FIG. 2 is a cross-sectional schematic representation of the hollow filament of FIG. 1 showing cells (4) (e.g. keratinocytes) that have been seeded into the porous inner filament by wicking a suspension of cells into the lumen of the filament and a clump of cells (5) (e.g.
- cultured dermal papilla cells or a hair follicle
- fragment) that has been seeded into the lumen of the filament by mechanically forcing it into an open end of the filament.
- FIG. 3 is a cross-sectional schematic representation of the filament of FIG. 2 shortly after implantation in the skin such that the proximal end (6) is in the dermis (7) and the distal end (8) is surrounded by down-grown epidermis (9).
- FIG. 4 is a scanning electron micrograph (SEM) of a hollow filament of the present invention made of a porous copolymer of d,1-lactide and glycolide (PLGA).
- FIG. 5 is an SEM of the porous inner surface of the hollow filament of FIG. 4, which was exposed by cutting open the tube.
- FIG. 6 is a light photomicrograph showing a filament (10) with the construction shown in FIG. 1 wherein the outer filament (1) is made of solid PLGA and the porous inner filament (2) is made of crosslinked hvaluronic acid (HAX). FIG. 6 also shows a filament (11) made of PLGA containing no HAX. Both filaments were placed on a drop of water (12) colored red with food color dye. The PLGA only fiber (11) floated on the top of the water and did not wick any water into the lumen of the fiber, whereas the HAX-containing PLGA fiber (10) rapidly wicked the water into the lumen, giving the fiber a red color.
- FIG. 7(A) is a photograph of a mouse vibrissa (whisker) follicle (13) and a PLGA hollow filament (14) with an inside diameter of sufficient size to accommodate the excised follicle.
- FIG. 7(B) is a photograph of the PLGA hollow filament of FIG. 7(A) with the follicle (13) inserted into the lumen.
- FIG. 8 is a photograph of a mouse whisker (15) that was observed growing on the back of a mouse against the background of regrown shaved pelage hair (16) 30 days post-implantation of a vibrissa follicle contained in a PLGA hollow filament.
- FIG. 9 is a photomicrograph of a hair follicle bulb
- (17) and hair shaft (18) growing under the skin of a mouse 30 days postimplantation of a mixture of cells obtained from neonatal mouse skin contained in a PLGA hollow filament (19).
- FIG. 10 is a side-by-side comparison of two photomicrographs taken at the same magnification of the underside of skin excised from a nude mouse that had been injected 13 days previously with cells obtained from newborn black mouse epidermis and dermis. Panel A shows the control injection site and panel B shows the injection site containing exactly the same number of cells except that the injection fluid also contained 5% (w/v) of condroitin-6-sulfate, which resulted in the neogenesis of hair follicles that are larger and more numerous than the control.
- FIG. 11 also is a side-by-side comparison of two photomicrographs taken at the same magnification of the underside of skin excised from a nude mouse that had been injected 13 days previously with cells obtained from newborn black mouse epidermis and dermis. Panel A shows the same control injection site of FIG. 10 and panel C shows the injection site in the same mouse containing exactly the same number of cells except that the injection fluid also contained 20% (w/v) of Pluronic (TM) F-127 surfactant (a copolymer of ethylene and propylene oxides), which resulted in the neogenesis of hair follicles that are larger than those in the control.
- FIG. 12 is a cross-sectional schematic representation of a hollow filament of the present invention in which the lumen (20) is slightly tapered to a closed end (21) attached to a porous plug (22).

- FIG. 13 is a cross-sectional schematic representation of a hollow filament of the present invention showing a fine pipette tip (23) containing cells (24) and fluid (25) that has been inserted into the tapered lumen
- (20).
- FIG. 14 cross-sectional schematic representation of a hollow filament of the present invention showing a suspension of fluid (25) and cells (24) being expelled from a pipette tip (23) whereby the cells collect in the closed end of the lumen (21) and the fluid (25) is fully absorbed in the porous pluq (22).
- FIG. 15 is a photograph of the hollow filament scaffold of Example 10 and a 10-microliter pipette tip (26) identical to the one that was used as a mandrel in the process for making this embodiment of the present invention. The sheath (27) is made of PLGA and the fibrous mass (28) contained in the bulbous tip (29) is made of crosslinked gelatin/chondroitin-6-sulfate filaments. Charcoal particles (30) collected in the proximal portion of the fibrous scaffold upon injection of a slurry of charcoal particles and water into the scaffold through a pipette tip inserted into the scaffold sheath.

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